WHAT'S HOT
IN
DATA
COMMUNICATIONS
AND DDP?

INTERFACE'80™

THE HOT SPOT

THE ONLY MAJOR CONFERENCE & EXPOSITION DEVOTED
TO DATA COMMUNICATIONS AND DISTRIBUTED DATA PROCESSING
MARCH 17-20, 1980 • MIAMI BEACH CONVENTION CENTER

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COMPLETE CONFERENCE AND REGISTRATION INFORMATION

HOT SOLUTIONS

IF you're involved with data communications/distributed data processing/networking/communications/data processing:

- as an administrator, manager, operator or designer. . .
- as a newcomer or as an advanced computer/communications practitioner. . .
- in business, industry, government, education or service. . .

or even if your interest is focused on just a single element of the overall system. . . INTERFACE '80 brings you the hot ideas and hot products you need for state-of-the-art solutions to your problems and projects.

The eighth annual presentation of the world's largest Conference and Exposition devoted to data communications/ddp, INTERFACE '80 is the one industry event you can't afford to miss!

HOT IDEAS

This year's comprehensive Conference program brings you the hot information you need to stay ahead. For users at every level of experience and sophistication, four full days of sessions feature:

- Tutorial and applications sessions on all aspects of data communications, distributed data processing, networking and the electronic office — the state-of-the-art today and the trends of tomorrow.
- DataComm School: a famous feature of INTERFACE, presented every year to standing-room-only audiences; it's an ideal introduction to and overview of data communications/ddp.
- And NEW THIS YEAR: 8 two-hour workshops examining key datacomm topics and issues in depth.

A total of 61 sessions presented by over 150 of the world's hottest datacomm consultants, users and educators. All designed to bring you practical knowledge -- and cost-effective solutions to your problems.

HOT PRODUCTS

The INTERFACE Exhibit Floor grows hotter every year. This year you'll find the largest display of datacomm/ddp/networking products and services ever assembled under one roof -- more than 200,000 square feet of exhibit space. It's your hot opportunity to inspect, discuss and evaluate the latest hardware, software, systems and services available from 250 exhibiting companies.

Terminals. . . Printers. . . Distributed Data Processing Systems. . . Modems. . . Multiplexers. . . Concentrators. . . Front End Processors. . . Mini- and Micro-based Systems, Subsystems and Peripherals. . . Interface Devices. . . Switching Equipment. . .. Word Processing Systems. . . Tech Control and Test Equipment. . . Data Base Management and Teleprocessing Software. . . Media and Supplies. . . Network and Value Added Services. . . and More!

THE HOT SPOT

MARCH 17-20, 1980, IN MIAMI BEACH

INTERFACE® '80

Conference and Exposition by The INTERFACE Group
160 Speen Street, Framingham, Massachusetts 01701
Toll-Free, (800) 225-4620 • In Massachusetts, (617) 879-4502

THE HOT SPOT

HOT PRODUCTS

THE EXPOSITION

On the INTERFACE '80 Exhibit Floor, you'll find virtually every product and service you may be looking for. More than 200,000 square feet of the Miami Beach Convention Center will be filled with the latest hardware, software, systems and services. 250 companies will be exhibiting -- ready and willing to answer your questions and discuss hands-on solutions to your datacomm/ddp/network projects and problems. To keep pace with the hot technological changes, INTERFACE '80 is The Hot Spot!

Plan to spend plenty of time on the INTERFACE '80 Exhibit Floor, where 250 exhibitors will occupy the equivalent of almost five football fields! The Exhibit Floor is *so* large, you'll need a colleague to join you, in order to inspect and discuss *all* the products and services on display on the huge Exhibit Floor. The Exhibits are open each day of the Conference. Schedule enough time to visit all 250 exhibits.

SOME OF THE COMPANIES YOU'LL MEET AT INTERFACE '80:

Able Computer Marketing
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Allen Services Corporation
AM International - Jacquard Systems Division
Amco Engineering Company
American Satellite Corporation
American Terminal Leasing Company
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HOT IDEAS

THE CONFERENCE

As our industry continues to evolve with astonishing speed, new concepts and new products abound -- together with new problems and new solutions. INTERFACE '80s Conference program brings you the hot news you need to keep pace -- and provide your organization with the cost-effective "information utility" it requires. Whether you're a beginner preparing to establish the simplest datacomm link -- or a seasoned professional looking to "distribute" your dp system or optimize performance on the most complex network -- you'll find sessions to fit your needs. Choose from a total of 61 sessions in 18 topic groupings -- including the famous DataComm School and eight new in-depth workshops -- all presented by the industry's hottest authorities. And all designed to help you stay ahead.

DATACOMM SCHOOL (DS)

New and expanded DataComm School returns once again, this time with four 2-hour sessions offering a relatively painless introduction to the basic fundamentals of this contemporary discipline. The successful "alumni" of previous editions of DataComm School now number in the thousands. This is your chance to join their ranks!

DS-1 Datacomm Fundamentals

Come up to speed with this non-technical orientation for newcomers on the basic hardware, software and transmission concepts of data communications. If you don't know a handshake from an ACK-NACK, nor a parity bit from a baud rate, this is where you begin to find out. You'll also discover why "down the pipe" carries a somewhat different meaning from "down the tube."

DS-2 Hardware/Software Relationships

When the processing power of hardware is unleashed by the complementary logic of software, a system results. And what happens at the next level when numerous systems are linked together into networks? Data communications is what happens, provided that still another level of appropriate software has been added into the mix.

DS-3 Databasics: An Introduction to the Communicating Data Base

The static data base of a large mainframe system has been around for a long time. But the proliferation of small computer systems now makes it possible for numerous users to access that base and, indeed, "download" a portion of that base for their own local processing requirements. This session won't make you an expert; it will enable you to talk with the experts!

DS-4 DDP Networking Concepts

From a hardware point of view, the cost of number-crunching capability continues to decline. CPUs are cheap, buy as many as you want, and put them wherever you perceive the need. It sounds like the millenium except, of course, that software costs continue to rise. In the real world, it's still a question of trade-offs, as you will better understand after this session.

POLICY ISSUES (PI)

The stage is set for significant growth in data communications in this decade, though the entanglements of regulation continue to limit progress. These sessions will update users on the steps already taken to deregulate more of our industry. You'll also learn what objectives U.S. regulators are laboring towards, hopefully, on our behalf.

PI-1 Regulation vs.Deregulation in the 80's: Striking the Proper Balance

Though the datacomm industry clamors for deregulation, what's in it for users? There have been moves to deregulate certain carriers, particular services and types of equipment. In the midst of such regulatory upheaval, an experienced panel will address the critical regulatory balance needed to ensure that users gain optimum benefits from new alternatives, regardless of who supplies them.

PI-2 Regulatory Objectives for User Progress in the 1980's

Which regulatory issues, if resolved in the 1980's, could significantly improve user productivity? Who should be setting objectives for datacomm regulation, and who should be measured for their success or failure in meeting such objectives? Attendees will hear responses to these questions from prominent participants in the regulatory arena.

THE ALL-DIGITAL DIMENSION (AD)

The herculean task of conversion to an all-digital transmission system continues, at a cost that rivals the gross national product of many countries. Users are preparing to go digital from the inside out. Those knowledgeable users will finally reap their rewards in the form of better and more reliable services at lower cost.

AD-1 Progress Toward All-Digital Communications

The digital communications revolution is well underway. But a hybrid analog/digital network of enormous complexity continues its robust existence. Between the digital promise and the hybrid reality stands the shadow of the user. . . wondering which way to tilt. This session will provide the clues.

INDUSTRY EDITORS ADVISORY BOARD

We are pleased to acknowledge the help and guidance of the Industry Editors Advisory Board. The Board's awareness of current and future trends has been invaluable by providing insights and focus to the planning process.

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AD-2 Integrating Voice and Data at the PBX

Confused about how to plan for the inevitable merger of voice and data communications? This session will help you avoid pitfalls in implementation, with examination of all-digital voice/data facilities and equipment, from handsets to PBX to remote terminals.

AD-3 Fiber Optics: The New Look in Local Loops

With far more throughput capacity and operational reliability than conventional wiring, fiber optic cabling is playing an increasingly important role in data communications. Network planners and analysts will learn the reassuring facts. . . here.

AD-4 All-Digital Satellite Services: Roof Top to Roof Top and Beyond

All-digital satellites will soon be operational, because they promise to improve transmission speed and quality at lower costs. Meanwhile, the present generation of hybrid satellites continues to offer a valuable range of services. Attendees will understand better how to position their companies to take maximum advantage not only of the hardware in the sky but also the equally important hardware on the ground.

SIMPLIFYING DATACOMM SOFTWARE (SS)

Complexities in datacomm software grow with the advent of new, more comprehensive network designs and functions. Yet increased productivity requires that we simplify software development and use. This session group offers methods to streamline the program development process through the use of new software packages and languages. New techniques and tools to build solid operating systems and database structures for distributed environments will be emphasized.

SS-1 New Multifunction Network Operating Systems

Central to all net productivity, the operating system has become more comprehensive in its role and more sophisticated in its operation. Multiple requirements for OS software are to manage data base applications, handle FEP loads, coordinate nodal traffic and monitor systems integrity. Attendees will learn how to use such operating systems to off-load more of their network chores.

SS-2 Higher-Level Languages to Aid Datacomm Programmer

Programmer productivity continues to be a major hurdle to the user of state-of-the-art datacomm systems. But help is on the way in the form of higher-level programming languages to facilitate faster program development and a greater ratio of more comprehensive service-to-machine language instructions. What new and improved higher-level languages are available will be discussed to aid those working in datacomm and DDP software environments.

SS-3 Packaged Solutions Improve Net Performance

Software solutions to specific datacomm problems have been designed for use throughout the network. These "packages" are now available for the discerning user to complement system software and improve overall net performance. Packages for datacomm/database, local and remote front-end processing, code and protocol translation, message switching, net control, and more are the subjects of this important session for those responsible for network productivity.

SS-4 Structuring Hierarchical Data Bases for DDP Nets (WORKSHOP)

Building a network often creates the need for a hierarchy of information flow, where smaller sites interact with larger ones for more storage or processing capability. Resource-sharing applies as well to the database, especially in a distributed data processing environment. Just how to structure a database within a distributed hierarchy will help attendees in this two-hour workshop to service their remote sites most productively while improving net performance.

INCREASING NET PRODUCTIVITY (NP)

The measure of a successful network manager is productivity. Achievement is based on one's ability to use new technology, apply effective software, optimize service selection, improve net throughput, and deliver the information and processing power required at remote sites. Attendees in these five sessions will improve their chances for success by learning what new approaches and tools can help to increase net productivity in the 1980s.

NP-1 Network Architectures: Assessing Evolving Alternatives (WORKSHOP)

Ever-improving network architectures, supplied through mainframes, minis or a mix of both, present new alternatives in the on-going quest for improved network performance. Whether one's processing is centralized or decentralized in concept, vendor improvements in the network's hardware/software building blocks offer new considerations and opportunities. In this two-hour workshop, attendees will discover how the major vendor network architectures are taking shape in the 1980s.

NP-2 Designing the Hybrid Voice/Data Net (WORKSHOP)

Convergence of technologies has facilitated the merger of voice and data communications in contemporary networks. New design methodologies for integrating information flows uncover significant benefits in optimizing transmission traffic. Attendees in this two-hour workshop will learn what digitizing and packetizing techniques and tools can do to blend voice and data into a more productive information network.

NP-3 New Tools and Techniques for Net Performance Optimization

Many think of their networks as high performance information engines and seek the mechanisms to adjust, fine-tune, and enhance their data throughput. Here is a session in which to learn the latest strategies and methods to optimize net performance through design, response measurement, load balancing, real-time monitoring, etc. Find out what can be achieved toward improving network productivity.

NP-4 Private Networks in a New Package

Having problems designing a private packet network? Some organizations now offer to build one for a user and deliver it at a package price. Here's a chance to get large scale sophistication at lower cost than would be paid for an equivalent effort, and in far less development time. Whether the concept is of interest for a major net project or to complement an existing net, attendees will find answers regarding who is providing what for how much.

NP-5 Update on Local Network Strategies

Some of today's local hookups are more complex than a nationwide network. Certainly the challenges are different when routing lines through walls and corridors, across streets and parking lots. What lies ahead to improve local network design and performance will be discovered by attendees at this session. Emphasis will be on net design considerations, alternative transmission facilities such as fiber optics and microwave, and distribution of processing power.

TECHNOLOGY LAB (TL)

Pandora's box was opened a long time ago, but the technological demons continue to flutter out in ever-increasing numbers. The common denominator for this extraordinary cluster of developments is the semiconductor industry's ability to increase the density of its miraculous "chips." Futurists on the INTERFACE circuit say the real action is yet to come!

TL-1 LSI and VLSI: Users to Benefit from Greater Integration

Perhaps Very Large Scale Integration (VLSI) will soon be succeeded by Incredibly Large Scale Integration (ILSI). One thing is certain: semiconductor manufacturers will continue for at least several more years to increase significantly the density of their chips, a density which already approaches that of the neurons in a human brain. Datacomm users can only benefit from more performance and higher reliability, at lower and lower cost.

TL-2 The 64K Memory Chip, and Beyond

A leading manufacturer has already shown a memory board with 1 megabyte of 64K chips. Packaging density trends indicate that the day of the 1 megabyte chip will arrive within the next few years. Bubble memory technology in datacomm terminals already delivers that kind of density, with charge-coupled devices (CCD) not far behind. The trend for datacomm is clear: greater memory capacities are coming in smaller packages and at lower cost!

TL-3 The 8-inch Winchester and What Follows

In recent years, not many system products have had quite the impact of the new 8-inch Winchester disk drive, with its extraordinary bundle of virtues: small size, high capacity, low cost, great reliability. But Winchester technology is not standing still at this point, content to rest on its laurels. Datacomm users will find out what's next in Winchester at this important session.

TL-4 Digitizing the Human Voice: The Sound of Systems to Come

On one level, voice digitization is an integral part of an on-going effort to modernize the existing common carrier network. On another level, computers that are voice-actuated, or that use voice recognition modules with a few standard commands, hold out the promise of eventual elimination of software for a degree of user transparency that is now almost unimaginable. Attendees will get an earful of what's to come.

DDP EMPHASIS: INFORMATION UTILITY (EU)

Users have passed the initial hurdles of concept acceptance and first-installation trauma in the race to succeed with distributed data processing. The greater challenge of providing what was promised from DDP now faces those pioneering users. In this session group, attendees will be guided in taking the next step: delivering "information utility" to end users. Such a requirement was what created the need for distributing data processing resources.

EU-1 DDP: Requirements Planning

For many DDP novices and experts, it's time for a review and update of requirements for a distributed data processing network. If end user requirements were not at the top of the previous planning list, prepare for some changes. This session will help those DDP decision makers to assess end user needs more completely and to understand how "information utility" as a key objective can accelerate the net's successful implementation.

EU-2 DDP: Ensuring End User Productivity

A further aid to focusing on "information utility" for DDP end users, this session discusses how to translate stated requirements into hardware, software, services and applications needs. Key considerations will cover the amount of processing power required, degree of end user sophistication, security, resource sharing and applications development. Methods of measuring the success of meeting end user requirements will be suggested.

EU-3 Achieving Balanced Computing

Providing an even processing load throughout the net has always been a major reason for DDP. Lest we lose sight of this important criterion for success, this session delves into the methods of distributing the processing load and ways to balance them optimally in the net. Emphasis will be given to trade-offs in large central host architectures versus evenly distributed hosts.

EU-4 New Desk-Top System Alternatives

While DDP systems are being installed in large numbers, some organizations are reviewing the capabilities of microcomputer systems to serve at remote sites. Attendees will hear how the micro with peripherals can be upgraded to handle database and higher-level language processing in a DDP environment. Such low-cost alternatives to larger systems or to limited-intelligence terminals are now highly productive problem-solvers on many a desk top.

DDP EMPHASIS: INDUSTRY CASE STUDIES (CS)

It is not only the ecologists who say that "smaller is better." In increasing numbers, users are enjoying the powerful flexibility of configuring systems into distributed data processing networks. Knowledgeable users from the financial, manufacturing and distribution communities present their own experiences in this important group of sessions.

CS-1 DDP: Manufacturing

Management information systems are now both integrated and distributed to include such diverse activities as manufacturing and inventory control, order processing and financial analyses. Interrelated networks are becoming a necessity in larger corporations. Attendees at this session will learn why and how these applications lend themselves to DDP, from pioneers who have already paved the way.

CS-2 DDP: Retail Distribution

From factory to warehouse to retail outlet, DDP can help the distributor track his merchandise. A well-informed distributor keeps customers satisfied. Whether you are considering DDP implementation, or have already done so, you'll learn from the case histories presented by these knowledgeable speakers.

CS-3 DDP: Insurance/Banking

Today's financial environment is being streamlined to maximize profits. Branch banks, brokerage houses, and insurance companies are demonstrating the need for remote processing capability as well as real-time transaction-oriented links to larger data bases. Distributed computing power is on-the-march in the financial community, and the experts are here to tell you all about it.

THE CORPORATE MESSAGE NETWORK (CM)

Office automation has become so weighty a concept that corporate officials are adrift in a quagmire of promises. Datacomm professionals can come to the aid of their executives by learning ways to translate heavy concepts into more realistic progress. This session group should offer constructive help to planners and implementors alike.

CM-1 Developing a Corporate Message Network (WORKSHOP)

Strategists will become implementors in this key two-hour workshop on corporate information flow and message communications. Objectives planning and requirements determination will help attendees discover the viability of electronic mail and message systems (EMMS) for their organizations. Steps in the logical progression of development will guide users in meeting realistic objectives for such systems.

CM-2 The Executive Information Service: Defining Requirements

A subset of the corporate message network, the executive information service now challenges many a datacomm pro. Management's growing need for real-time reporting and acting on financial and operating data promotes new technologies such as teleconferencing, executive mail, and the portable office. This session will guide attendees in applying recognized solutions to these sophisticated requirements.

CM-3 Routes for Delivering Electronic Mail. . . Today!

Many have already tested electronic mail and message systems, while leaving the development problem to others. Attendees will learn of the growing number of shared services and packaged EMMS systems that promise cost-effective solutions to users. Comparative analyses of what is offered, by whom, will prepare users for intelligent decision-making.

PROCESSING/COMMUNICATING THE WORD (CW)

Data processing, word processing, data/word communications, information storage-retrieval-copying: It's all coming together with a rapidity which is startling even to jaded veterans. Depend on INTERFACE experts to offer you a snapshot of "office automation," briefly frozen at state-of-the-art perfection!

CW-1 Key Trends for Multifunction Office Systems

Now is the time and here is the place for productive planning of the automated office. Attendees will gain insights into electronic mail, computer conferencing, all-digital facsimile transceivers and other multi-function systems for creating the "paperless office."

CW-2 Seeking Teleprinters for W-P Applications

Stimulated by the ubiquitous microprocessor, teleprinter technology continues to advance on all fronts. Photo-reproducible copy can now be transmitted via satellite at remarkably low cost. Daisy wheels battle ink jets, and line printers may contend with electrostatics, but the key to the final outcome probably rests with the optimum configuration of processing power and on-line storage.

CW-3 New Ways of Integrating Word and Data Processing on Distributed Networks

The same digital technology is used to process "data" or "words." But just as it is possible to optimize a system for one task or the other, so also is it possible to optimize the somewhat larger system, the network. Again, we enter the realm of trade-offs and the necessity for the manager to have at least a limited understanding of what the relevant trade-offs are.

TRENDING TOWARDS EXTENDED NETWORK SERVICES (EN)

Though our largest carrier has acknowledged a delay with its ACS, many other suppliers of extended network services (both real and potential) have not missed a beat in their plans to offer a rich variety of services in combination with communications. Public nets are aspiring to complement private nets, extensive EMMS offerings are becoming common services, specialized services are being shaped by market and industry. Here's the session group to find out what ENS has in store for users.

EN-1 Complementing Private Nets with ENS

The move is on to enhance network capability through ENS. To broaden one's reach, expand service to end users, and avoid problems of incompatible equipment, ENS offers productive solutions to those attending this session. Emphasis will be given to the private net user and the trade-offs to be faced in applying ENS as a complementary service.

EN-2 Matching ENS to Current and Future Applications (WORKSHOP)

Comparing apples of different types is the measure of this important session. The proof may be in the eating for many users, but attendees will be updated on current flavors available from such services as XTEN, TYMNET, TELENET. Futurists, and exasperated planners, will receive yet another prognosis for ACS and SBS. Don't miss this tasty comparison of key alternative services.

EN-3 Viewdata's Impact on Future ENS Offerings: Datavision vs. Television

Consumer information systems, such as Britain's Viewdata, are on their way to any home that wants them. The combination of ENS, satellites, microwave towers, cable communications, and television -- already in place -- can make it all happen. All that's left is the synergistic synthesis. Both marketers and users in attendance will be turned on and tuned in to the possible advantages such technology represents for reaching purchase decision makers, employees, stockholders, sales people, etc.

INTERNATIONAL OPERATIONS (IO)

Data communications has made the world smaller, but international networks are no less challenging. Attendees will hear how new directives governing transborder data flow and even the frequency spectrum utilization of our atmosphere will impact the plans of multi-national users. Improved technology and increased competition among international carriers create new opportunities for those attending the workshop session on multi-national networks.

IO-1 What WARC Decisions Mean to US Users

Conclusions and policies formed at the recent World Administrative Radio Conference have far-reaching implications for users from every nation. An entire spectrum of transmission frequencies for worldwide voice, video and data traffic is being allocated today, for years to come. Potential limitations on communications via satellite and additional cost considerations for information flow will be emphasized to aid users of both domestic and international networks.

IO-2 Multinational Networks: Net Strategies for Design and Management (WORKSHOP)

International carrier competition is heating up, which means lots of new alternatives for users. Net productivity is the subject of this two-hour workshop. Users with multinational nets will be updated on new design and management approaches which offer greater cost-effectiveness. An update on how major countries are progressing in datacomm development will aid U.S. planners in forecasting their prospects for productivity in the 1980s.

IO-3 Transborder Dataflow: Current Techniques, Issues and Challenges

Global information flow has its advocates and antagonists, as the world awakens to the economic value of information. This session offers practical network design strategies to contend with the immediate transborder dataflow problems at hand, while it updates attendees on emerging issues and challenges. Key areas of PTT involvement, IRC alternatives and network protocols will be emphasized.

FAIL-SAFE NETWORK CONTROL (FS)

Tech and network control advances have provided some users high reliability networks, but many others are still in a quandry as to how much control they need and at what cost. This session group helps provide answers to users seeking their next step to higher up-time in the net. Considerations of cost versus control will be addressed in terms of objectives, design alternatives and new strategies.

FS-1 Achieving Performance Goals in Contemporary Networks

Managers of tech and net control are measured by their ability to keep networks operating at the highest levels of up-time. Net performance, though an integral aspect of control, often has other measures of success. Attendees at this session will learn of new considerations in establishing control-related performance goals.

FS-2 Principles of Design for Fail-Safe Network Control

Here's a chance to hear how thorough net control facilities can be. Key considerations addressed will include setting control objectives, establishing control functions, analyzing equipment needs, real-time problem solving, control reporting systems, and maintenance. As a result, users should be able to determine the extent to which their network already has (or can implement) fail-safe network control.

FS-3 Programmed Maintenance: Strategy and Tactics

Much progress has been made in assessing the type and frequency of network control problems. Attendees will gain from the insights of those who have compiled such statistics and their programmed strategies as a result. New tools and strategies discussed will include systems to uncover and report malfunctions, analyze and initiate corrective actions, and manage repair and maintenance activities.

TOWARDS THE TRANSPARENT INTERFACE (TI)

Network complexities are becoming increasingly transparent to the user. The concept of "transparency" conveniently explained how public nets would accommodate all manner of dissimilar hardware and communication protocols. Other network interfaces are adopting the concept to simplify operations for the user. This session group explores how various interfacing modules are doing more, so users can do less.

TI-1 New Architectures Focus on FEPs

As the network architectures of major vendors evolve, they increasingly focus on front-end processors for data flow management. Session attendees will hear of the strategies behind these design concepts and the new FEP capabilities these architectures propose. Speakers will stress the more interesting developments in local and remote FEPs offered by major suppliers.

TI-2 Multifaceted Modems and MUXs Emerge

Addressing the need to handle more and more interface complexities, recent modem and multiplexer offerings are stressing multifunction capability. New channel switching capacities, diagnostic controls and protocol handling capabilities, available and planned, are the subjects of this session. Attendees will appreciate the update in this fast-moving area.

TI-3 Network Nodes Show More Intelligence

Much of the quest to off-load network burdens from the user is being resolved by increasing intelligence at the nodes. Remote optimization, packetizing, diagnostics, etc., are adding to the normal nodal chores of multiplexing. Attendees will be updated on the trends in such hardware with emphasis on the on-premises nodes required for new Extended Network Services (ENS).

COMMUNICATIONS TOOLS AND SERVICES (OC)

Communications links can be packaged and sold in a never-ending variety of attractive ways. That's what the carriers are in business to do, and judging from their annual reports that is what they do with considerable success. At the same time, manufacturers continue to churn out devices (systems) which send/receive from these links. User sophistication is essential!

OC-1 New Tools for Office Communications

The unattended, communicating copier was last year's microprocessor-controlled sensation. This year? Possibly the next generation of all-digital facsimile transceivers. Just ahead is the integration of these and other records management-storage-retrieval systems into one continuous message stream. This session will add to your understanding of these new tools.

OC-2 Strategies for Transmission Service Selection (WORKSHOP)

The system is the solution, according to the advertising theme of the world's leading common carrier. But since "the system" and its somewhat competitive counterparts are very complex, the range of service offerings is sometimes equally difficult to comprehend. The key panel for this two-hour workshop is composed of independent experts, who have devoted their professional lives to skeptical scrutiny of "the system" and its alternatives.

TERMINAL ADVANCES (TA)

Man's machine interface with information systems continues to evolve in both functionality and versatility. Terminals are now structured with more intelligence and storage capacity than ever. Sessions in this group will update attendees on the myriad alternatives available, and under development, in CRT and teleprinter devices, as well as specialized transaction terminals.

TA-1 Workstations to Center on CRT Intelligence

Demand for greater productivity at remote sites has led to coupling of CRT and teleprinter devices into "workstations." According to the CRT's degree of intelligence, workstation capability may be significant or limited. Attendees will be updated on the latest CRT technology around which to configure workstations suitable for the future.

TA-2 Teleprinters Upgrade Their Image

Different types of teleprinters now number in the hundreds, and new devices are introduced on a weekly basis. Such interest in these products has fueled an upgrade in their quality, speed and versatility. Here's an opportunity to view recent improvements in teleprinter technology and to do some comparative analyses for teleprinters that will increase user's output.

TA-3 Transaction Terminals Stress Versatility

As terminals become smarter, their versatility increases. We are limited only by our own imagination in determining what functions terminals can perform. Session attendees will discover some of the important

ways new, specialized transaction terminals are expediting information flow in various applications such as banking, business services, security, etc.

MULTIFUNCTIONALITY IS THE MODE (MM)

The need to make datacomm tools more productive has led to a new technological concept, as users will discover in this key session group. "Multifunctionality" is the term users will apply in explaining their preference for one product or system over another. Hardware integration from chip to system plus sophisticated software and firmware have added new dimensions of capability to tools and systems once restricted to single applications.

MM-1 Multipurpose Micros Proliferate

Multifunctionality has its origin in the tremendous expansion in capability and use of microprocessors at the circuit and board levels. What more to expect from micros in datacomm will be disclosed to session attendees keenly interested in optimizing their hardware and software decisions. Emphasis will be given to ways multipurpose micros will enhance presently available products and create new offerings.

MM-2 DDP Systems Handle Data Entry

A natural extension of the capability of DDP systems is the area of data entry. Now the processing power and storage capacity of distributed systems can take on the function of data entry cost-effectively. Attendees will learn the approaches that have been implemented successfully, using multi-terminal DDP systems for data capture, editing and communication.

MM-3 New Graphics Tools for Managers and Scientists (WORKSHOP)

A window is opening on the datacomm world through the versatility of new multifunction graphics terminals and systems. The host of new applications to enter through that window will provide support for business and technical efforts alike. Attendees at this two-hour workshop will hear about low-cost graphics terminals that even offer color to improve end user understanding and ability to react to critical information. Speakers will stress the multi-purpose aspect of this new breed of graphics tools.

MANAGING FOR RESULTS (MR)

Certainly, it is important for managers to have some understanding of the relevant datacomm technologies. But it is equally important that datacomm be placed in a perspective which positions the new discipline as yet another powerful tool for the accomplishment of traditional corporate objectives. That's the point of this group of sessions.

MR-1 Delivering Information Utility to Remote Users

The remote user, "remote" in the sense that he is based some distance away from corporate headquarters, tends to be very subjective in his evaluation of the company's data communications services. He wants to know, (1) what's in it for him and (2) what have you done for him lately? Attend this session, and you'll develop a clearer understanding of what it takes to serve the no-nonsense remote user.

MR-2 Five-Year Forecast of Datacomm/DDP Expenditures

In order to invest their company's finite resources to best advantage, datacomm managers must understand how various technological and service trends will impact their own corporation's operational strategies. That sounds difficult, but this session will help you make progress towards that goal.

MR-3 New Ways to Stimulate Corporate Growth Through Datacomm

In an era of chronic inflation and brutally squeezed profit margins, Return-on-Investment (ROI) is applied across the board with renewed vigor. Every datacomm investment must be justified in terms of what it does for the corporation. Real gains in profitability must be carefully distinguished from the illusory.

MR-4 New Methods of Recruiting and Developing Datacomm/DDP Professionals

Hardware is cheap, and software is plentiful. But where are the people who can make the miracles happen? The explosive growth of Datacomm/DDP has fueled an equally explosive shortage of qualified professionals. Not to worry: Help is on the way from numerous experts, some of whom will participate in this key session!

MR-5 Datacomm/DDP Career Paths in Tomorrow's Corporate Information Hierarchy

The powerful new Datacomm/DDP tool: who gets to control it -- and, by logical extension, will be in a position to control the corporation's destiny? INTERFACE experts, corporate strategists all, will have some surprising comments on this most sensitive question.

When you register for the INTERFACE '80 Conference, you may attend as many sessions as you wish, with no reservations required. With a total of 61 sessions, it is impossible for one person to attend all sessions; but the schedule has been arranged for optimum use of your time to cover related topics. To cover even more, encourage your associates to come along to share the program load. Check the Program Schedule and plan a program that best fills *your* needs. Note that all four DataComm School Sessions are repeated.

PROGRAM SCHEDULE

MONDAY

TIME	SESSION		ROOM
9:00-10:15		Keynote	102
10:30-12:00	TL-1	LSI and VLSI: Users to Benefit from Greater Integration	103A
10:30-12:00	FS-1	Achieving Performance Goals in Contemporary Networks	103B
10:30-12:00	SS-1	New Multifunction Network Operating Systems	100A
10:30-12:00	MM-1	Multipurpose Micros Proliferate	100B
10:30-12:00	TA-1	Workstations to Center on CRT Intelligence	100D
10:30-12:00	EU-1	DDP: Requirements Planning	204
10:30-12:00	IO-1	What WARC Decisions Mean to US Users	202
3:30- 5:00	MR-1	Delivering Information Utility to Remote Users	100D
3:30- 5:00	CS-1	DDP: Manufacturing	204
3:30- 5:00	CW-1	Key Trends for Multifunction Office Systems	202
3:30- 5:30	NP-1	Network Architectures: Assessing Evolving Alternatives	102A
3:30- 5:30	DS-1	Datacomm Fundamentals	100B
3:30- 5:30	CM-1	Developing a Corporate Message Network	100C

EXHIBITS OPEN 12:00 NOON - 5:00 P.M.

TUESDAY

9:00-10:30	AD-1	Progress Toward All-Digital Communications	102A
9:00-10:30	OC-1	New Tools for Office Communications	102B
9:00-10:30	TL-2	The 64K Memory Chip, and Beyond	100D
9:00-10:30	TA-2	Teleprinters Upgrade Their Image	204
9:00-10:30	TI-1	New Architectures Focus on FEPs	202
9:00-10:30	MR-2	Five-Year Forecast of Datacomm/DDP Expenditures	200
9:00-11:00	PI-1	Regulation vs. Deregulation in the 80's: Striking the Proper Balance	103
9:00-11:00	DS-2	Hardware/Software Relationships	100B
10:45-12:15	EN-1	Complementing Private Nets with ENS	102A
10:45-12:15	AD-2	Integrating Voice and Data at the PBX	102B
10:45-12:15	SS-2	Higher-Level Languages to Aid Datacomm Programmers	100A
10:45-12:15	MM-2	DDP Systems Handle Data Entry	100D
10:45-12:15	FS-2	Principles of Design for Fail-Safe Network Control	204
10:45-12:15	EU-2	DDP: Ensuring End User Productivity	202
10:45-12:15	MR-3	New Ways to Stimulate Corporate Growth through Datacomm	200
3:30- 5:00	TI-2	Multifaceted Modems and MUXs Emerge	103A
3:30- 5:00	TA-3	Transaction Terminals Stress Versatility	100D
3:30- 5:00	AD-3	Fiber Optics: The New Look in Local Loops	204
3:30- 5:00	CW-2	Seeking Teleprinters for W-P Applications	202
3:30- 5:00	MR-4	New Methods of Recruiting and Developing Datacomm/DDP Professionals	200
3:30- 5:30	MM-3	New Graphics Tools for Managers and Scientists	102A
3:30- 5:30	OC-2	Strategies for Transmission Service Selection	102B
3:30- 5:30	DS-3	Databasics: An Introduction to the Communicating Data Base	100B

EXHIBITS OPEN 10:00 A.M. - 5:00 P.M.

WEDNESDAY

9:00-10:30	TL-3	The 8-inch Winchester and What Follows	102B
9:00-10:30	CM-2	The Executive Information Service: Defining Requirements	100D
9:00-10:30	FS-3	Programmed Maintenance: Strategy and Tactics	204
9:00-10:30	CS-2	DDP: Retail Distribution	202
9:00-11:00	PI-2	Regulatory Objectives for User Progress in the 1980s	103
9:00-11:00	IO-2	Multinational Networks: Net Strategies for Design and Management	102A
9:00-11:00	DS-4	DDP Networking Concepts	100B
10:45-12:15	TL-4	Digitizing the Human Voice: The Sound of Systems to Come	102B
10:45-12:15	TI-3	Network Nodes Show More Intelligence	204
10:45-12:15	CS-3	DDP: Insurance/Banking	202
10:45-12:15	CW-3	New Ways of Integrating Word and Data Processing on Distributed Networks	200
3:30- 5:00	IO-3	Transborder Dataflow: Current Techniques, Issues and Challenges	102B
3:30- 5:00	AD-4	All-Digital Satellite Services: Roof Top to Roof Top and Beyond	100A
3:30- 5:00	EU-3	DDP: Achieving Balanced Computing	100D
3:30- 5:30	NP-2	Designing the Hybrid Voice/Data Net	102A
3:30- 5:30	DS-1	Datacomm Fundamentals **(R)**	100B

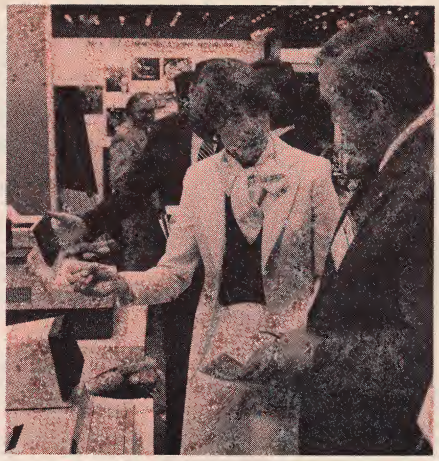
EXHIBITS OPEN 10:00 A.M. - 5:00 P.M.

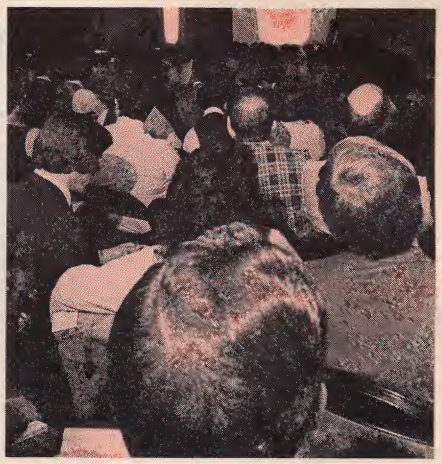
THURSDAY

9:00-10:30	SS-3	Packaged Solutions Improve Net Performance	103A
9:00-10:30	NP-3	New Tools and Techniques for Net Performance Optimization	100D
9:00-10:30	EU-4	DDP: New Desk-Top System Alternatives	204
9:00-11:00	EN-2	Matching ENS to Current and Future Applications	102A
9:00-11:00	SS-4	Structuring Hierarchical Data Bases for DDP Nets	102B
9:00-11:00	DS-2	Hardware/Software Relationships **(R)**	100B
10:45-12:15	CM-3	Routes for Delivering Electronic Mail. . . Today!	103A
10:45-12:15	MR-5	Datacomm/DDP Career Paths in Tomorrow's Corporate Information Hierarchy	103B
10:45-12:15	EN-3	Viewdata's Impact on Future ENS Offerings: Datavision vs. Television	100A
10:45-12:15	NP-4	Private Networks in a New Package	100D
10:45-12:15	NP-5	Update on Local Network Strategies	204
11:30- 1:30	DS-3	Databasics: An Introduction to the Communicating Data Base **(R)**	100B
2:00- 4:00	DS-4	DDP Networking Concepts **(R)**	100B

EXHIBITS OPEN 10:00 A.M. - 3:00 P.M.

THE HOT SPOT





TO GET TO THE HOT SPOT. . .

INTERFACE '80 is scheduled for the Miami Beach Convention Center, March 17-20, 1980.

March is the height of the "season" in Miami, when the ideal weather draws more people to Florida than at any other time of year. The "hot" location is another reason you'll want to be at INTERFACE '80.

Airline reservations to INTERFACE '80 may be difficult to come by, so INTERFACE has made special arrangements with Eastern Airlines to handle the flight requirements of our attendees. Eastern will be working to find available seating for you -- regardless of what airline your flight may involve. For this top priority service, call Eastern's TOLL FREE convention phone number: **(800) 327-1295**

Don't forget to mention INTERFACE '80. Please call the airline *as soon as possible* to make reservations. The longer you delay, the more difficult flight arrangements may be.

REGISTRATION INFORMATION

Avoid waiting in line at the show. Register now! Just complete the attached Registration Form and send it to:

Conference Registration Department
INTERFACE '80
160 Speen Street
Framingham, Massachusetts 01701

To register by phone, call TOLL FREE **(800) 225-4620** [in Massachusetts, call **(617) 879-4502**].

REGISTRATION FEES FOR INTERFACE '80

2-4 Full Days of Conference Sessions*	$95
Single Day of Conference Sessions*	$60
Exhibits Only	$10

**Includes admission to Exhibit Floor.*

SHOW HOTELS FOR INTERFACE ATTENDEES

INTERFACE has made arrangements with a number of Miami Beach hotels to provide accommodations for all our attendees. We have reserved blocks of rooms at the "Show Hotels" listed below-- many at special "convention" rates. Additionally, shuttle buses to the Convention Center will service only "Show Hotels." In order to take advantage of these blocked rooms and special rates, you must make your hotel reservations through INTERFACE. Indicate your hotel preferences on the Registration Form. We will make your reservations for you.

HOTEL	SINGLE	DOUBLE	SUITE
Algiers	$28	$30	-----
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Columbus	$47-51	$56	-----
*Deauville	$58	$62	$128 up
Dupont Plaza	$51	$63	-----
Eden Roc	$76-96	$76-96	-----
Holiday Inn	$52	$59	-----
Howard Johnson's	$55	$62	-----
*Intercontinental(1)	$70(1)	$78(1)	--(1)--

HOTEL	SINGLE	DOUBLE	SUITE
*Konover	$55	$59	$120
Lido Spa	$50	$53	-----
Monte Carlo	$63	$63	-----
Montmartre	$42	$48	-----
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30 **Finance:** Banking, Insurance, Securities & Credit
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21 Finance
22 Data Processing
23 Data Communications
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USAGE CATEGORY

60 End User
62 End User Buying in OEM Quantities
61 OEM

SIZE OF ORGANIZATION

70 Under 100
71 100-499
72 500-999
73 1000-4999
74 Over 5000

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